006727 "892h760

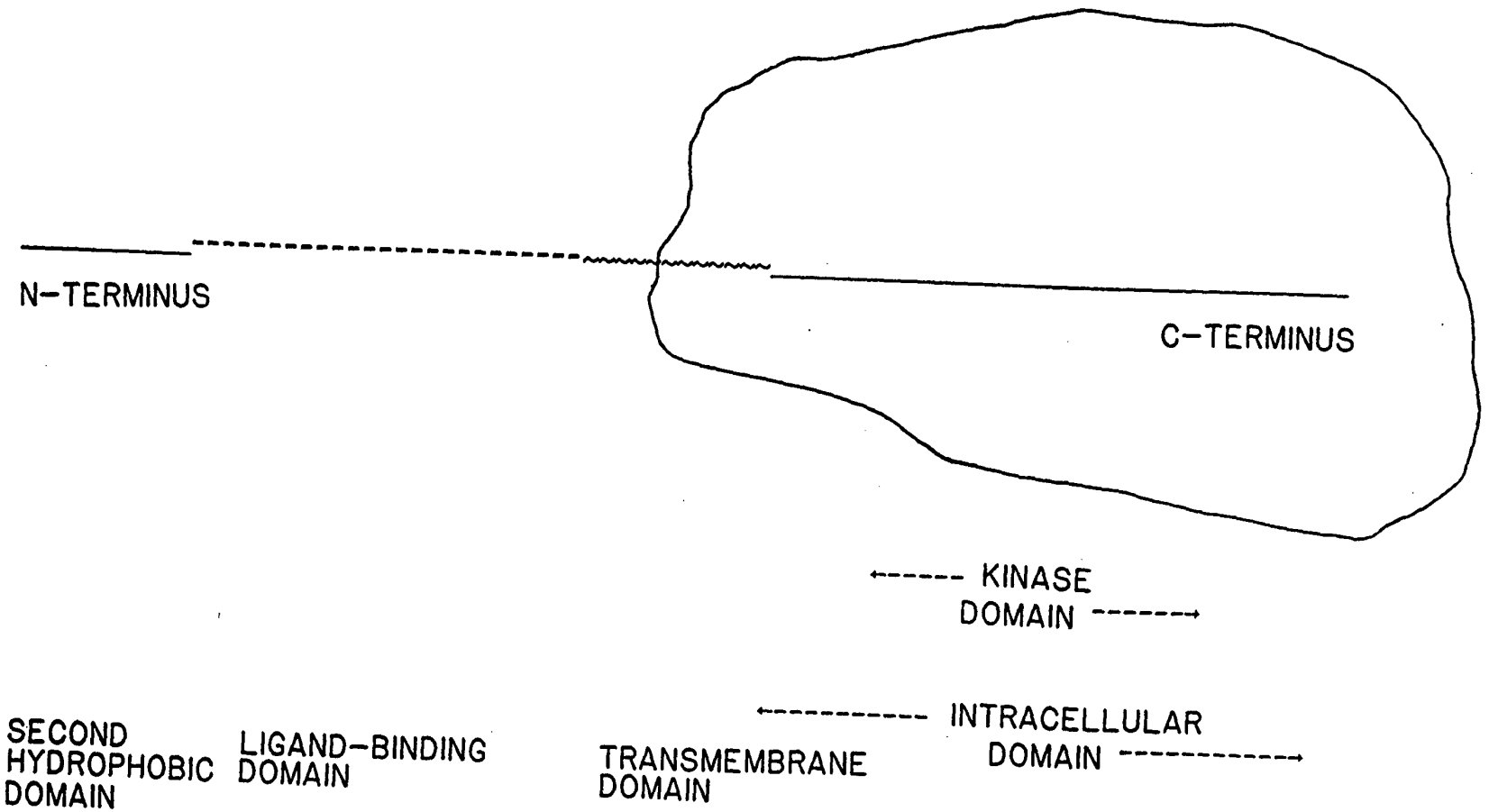
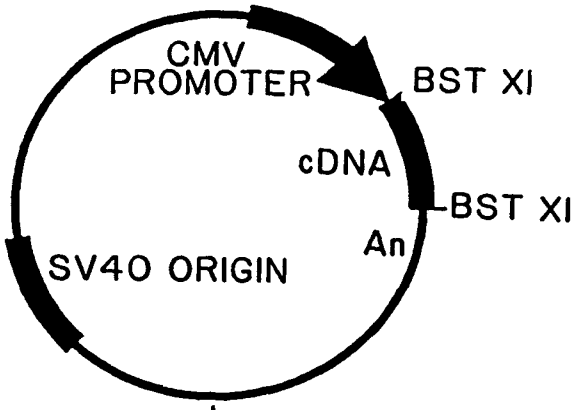


FIG. 1

Matthews et al.
741 9981

Divide a cDNA library in a mammalian expression vector into pools of 1000 clones, prepare DNA from each pool



Transfect COS cells directly on microscope slides

Bind [125I] activin A, wash cells, fix, dip in photographic emulsion

Subdivide bacteria from positive pool and rescreen; repeat until receptor clone is pure

FIG. 2

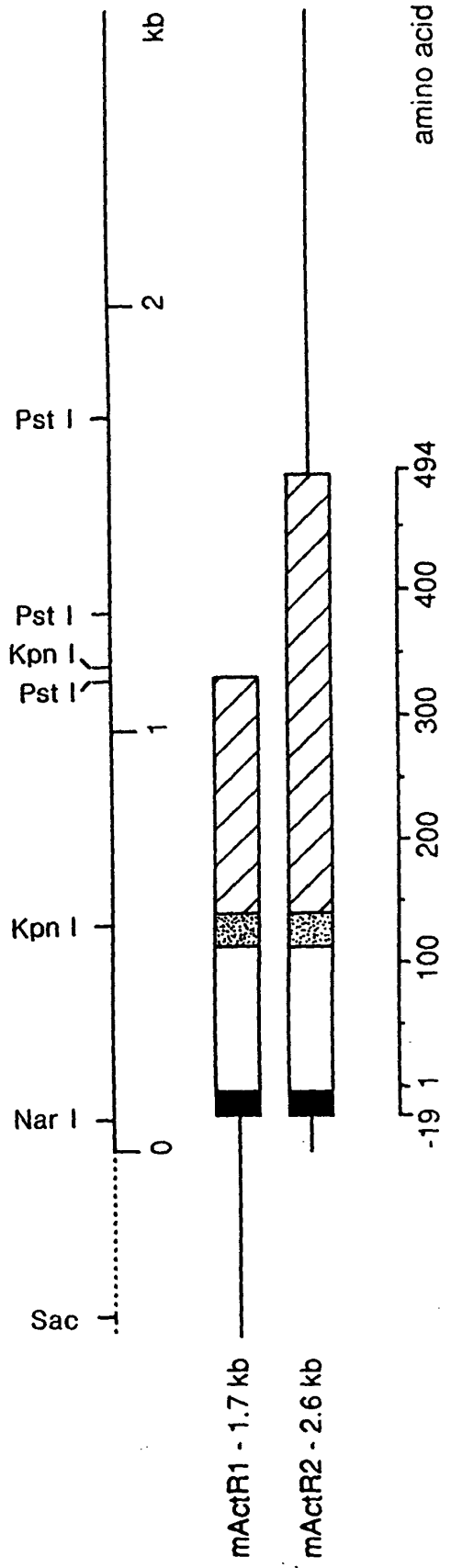

kb
2
1
0
Pst I
Pst I
Kpn I
Pst I
Kpn I
Nar I
Sac
mActR1 - 1.7 kb
mActR2 - 2.6 kb
amino acid
494
400
300
200
100
1
-19
3
0
-3
hydrophobicity

FIG. 3

006727 h892h760

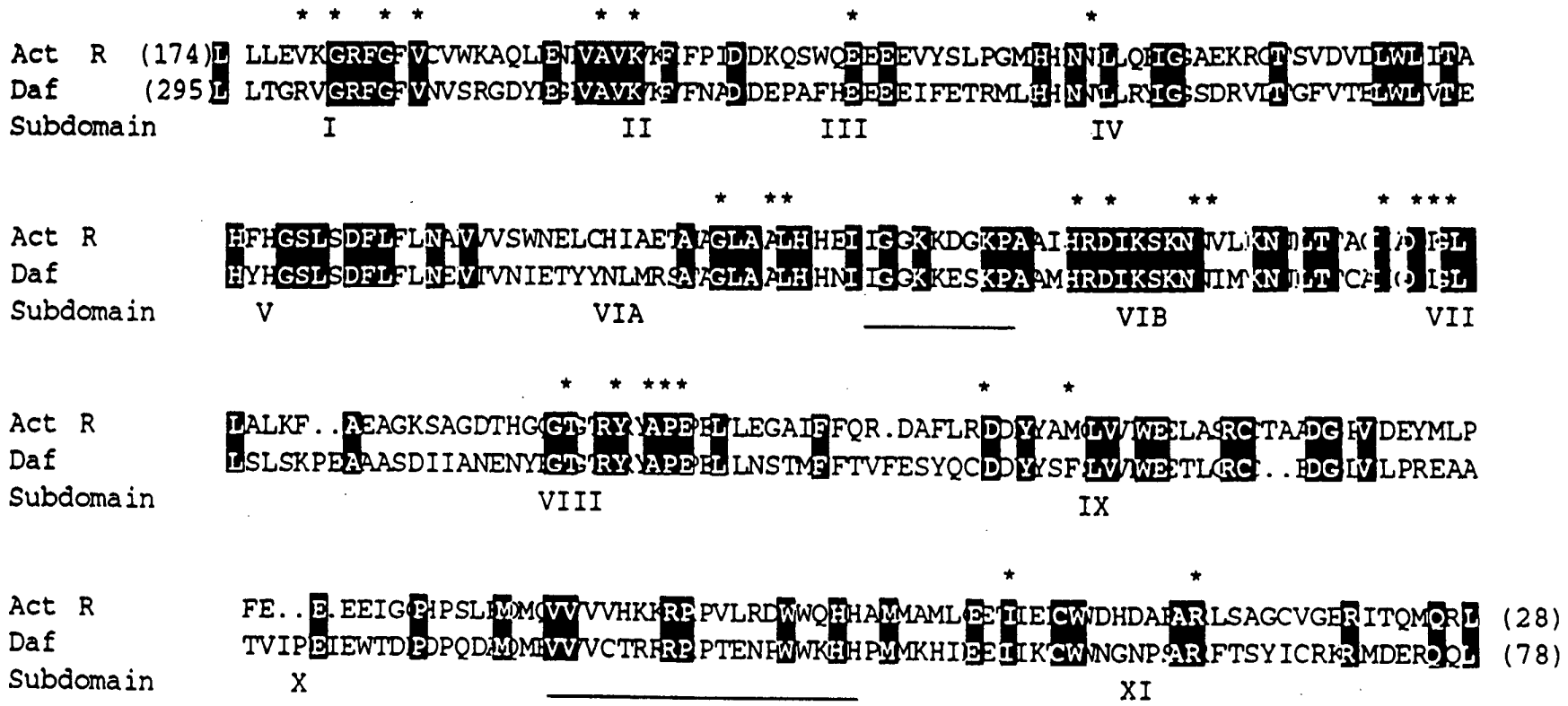


FIG. 4

Mathews et al.
P41 9981

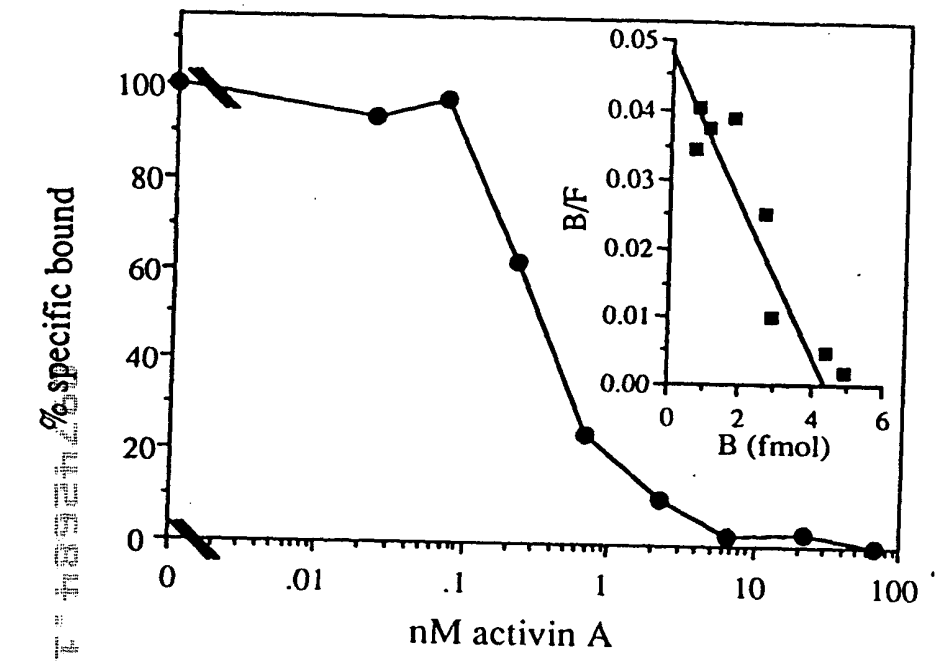

% specific bound
100
80
60
40
20
0
0
.01
.1
1
10
100
nM activin A
B/F
0.05
0.04
0.03
0.02
0.01
0.00
0
2
4
6
B (fmol)

FIG. 5A

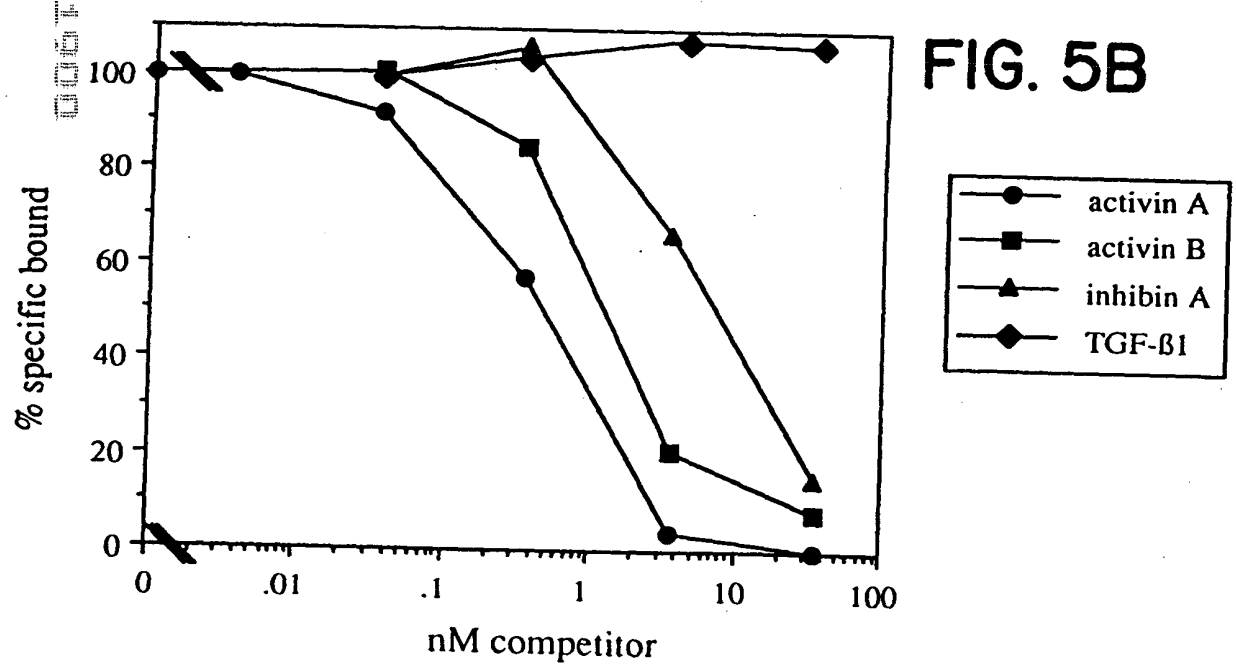

% specific bound
100
80
60
40
20
0
0
.01
.1
1
10
100
nM competitor
activin A
activin B
inhibin A
TGF-ß1

FIG. 5B

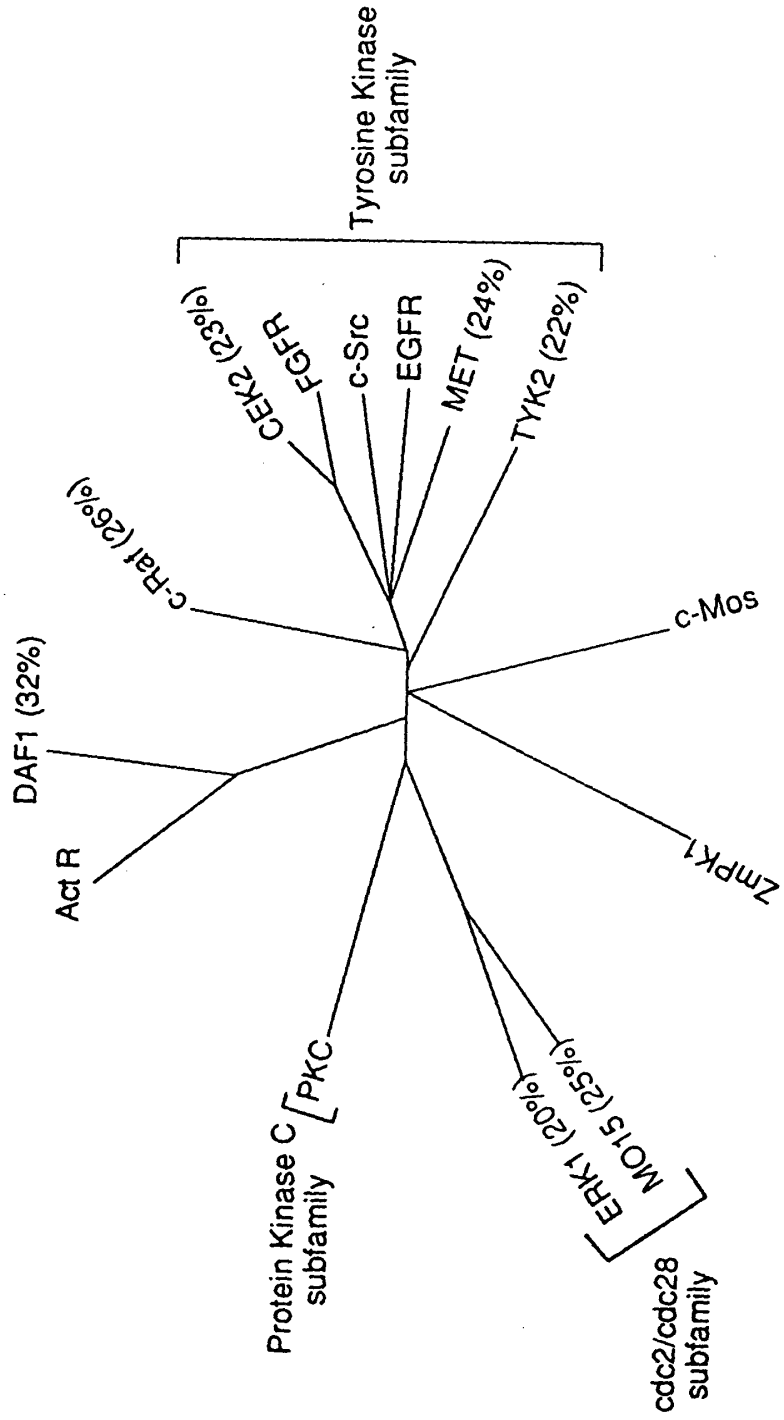

Tyrosine Kinase subfamily
CEK2 (23%)
FGFR
c-Src
EGFR
MET (24%)
TYK2 (22%)
c-Mos
ZmPK1
ERK1 (20%)
MO15 (25%)
cdc2/cdc28 subfamily
PKC
Protein Kinase C subfamily
Act R
DAF1 (32%)
C-Ral (26%)

FIG. 6